DOCUMENT RESUME

ED 120 303 UD 015 886

AUTHOR Stranix, Edward L.
TITLE A Study of Attitudinal Changes in Inner City Students as a Result of Constructive Participation in an Urban Environmental Studies Program.
NOTE 17p.; Paper presented at the First National Conference on Urban Education (Kansas City, Missouri, November 1975)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS *Action Research; Activity Learning; *Changing Attitudes; Cognitive Tests; Community Action; Course Objectives; Course Organization; Disadvantaged Youth; Grade 7; Grade 8; *Minority Group Children; Primary Education; *School Attitudes; Secondary Education; *Urban Environment
IDENTIFIERS *Pennsylvania (Philadelphia)

ABSTRACT

Two classes, each comprised of seventh and eighth grade students, are used to test the hypothesis that student participation in observing and solving real-life environmental problems increases positive changes in their attitudes toward school. Two methods of teaching urban environmental studies are used: an experimental community action approach using instamatic cameras and super 8mm cameras, and a traditional classroom instruction using the latest films, film strips, multimedia kits, records, texts, and pamphlets dealing with urban environmental problems. Results of the testing show that significant gains are attained by the experimental group in all seven attitudinal areas tested. The teacher made cognitive tests results exhibits no significant differences between the two groups. Generally, the test results demonstrate that inner-city students attitudes toward school improve when they are given an opportunity to participate in urban action projects which deal with real-life community concerns, and that students in both groups gain an equivalent degree of factual knowledge in the area of urban environmental problems. Using the urban environment as a learning resource and initiating student action groups are recommended for elementary students as well as for teenagers involved in urban studies programs. (Author/AM)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED120303

A Study of Attitudinal Changes in Inner City Students as a Result of Constructive Participation in an Urban Environmental Studies Program.

by

Edward L. Stranix, Ph.D.

School System of Philadelphia

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

UD015886

ABSTRACT

The purpose of this study was to test for attitudinal changes toward school in inner-city students after participating in an experimental action-oriented urban studies program. The study took place at the Rhodes Middle School in Philadelphia, Pennsylvania. Two classes, each comprised of seventh and eighth grade students, were involved in the study.

The first class, a control group, received traditional classroom instruction.

The second class, an experimental group, used an action-oriented approach to urban studies.

Both the experimental and the control groups received pre and post tests using The School Morale Scale. This instrument measured student attitude toward instruction and instructional materials, school buildings, community support and parental involvement, and general feelings about school, as well as inter-student, teacher-student, and administrator-student relationships. An additional teacher-made cognitive test was presented to both groups.

The results of the testing showed that significant gains were attained by the experimental group in all seven attitudinal areas tested. The cognitive test results exhibited no significant differences between the two groups.

A professional 16 mm film of the entire project is available and should be viewed to appreciate the uniqueness of the community action approach.

A $4,500 grant from Project KARE (Knowledgeable Action to Restore our Environment) and an additional grant of $1,600 from the Achievement for Individual Development Program of the School System of Philadelphia made this study possible.

INTRODUCTION

It is the thesis of this paper that participation of students in observing and solving real-life environmental problems will create a positive change in student attitudes toward school. To examine the hypothesis, two teaching groups were formed. The first group tested used an experimental community action approach; this process incorporated no published materials, but, instead, used instamatic cameras and super 8 mm cameras. The students searched for and discovered local environmental problems.

Once the students defined the problems as graffiti, abandoned cars, abandoned houses, and litter, they began to plan their solutions to these problems. They narrowed their attention to one Philadelphia city block (2900 Clementine Street) and started to work.

The second group tested was a control group which emphasized the traditional classroom instruction. This instruction involved the use of the latest films, film strips, multi-media kits, records, texts, and pamphlets dealing with urban environmental problems.

The purpose of this study was to determine which of these two methods of teaching urban environmental studies would produce the greatest attitudinal change in students as reflected in The School Morale Scale. This writer felt that the experimental community action approach would result in a greater positive attitudinal change. If this hypothesis is justified,

inner city school systems could formulate similar programs using action-oriented approaches to teaching urban environmental studies.

DESIGN OF THE STUDY

The study took place at the E. Washington Rhodes Middle School, located at 29th and Clearfield Streets in North Philadelphia. Rhodes Middle School has an all-black student population in grades five, six, seven and eight.

Two groups of thirty students each participated in the study. Each group consisted of a combination of seventh and eighth grade students, all of whom were pre-tested with The School Morale Scale. The test included eighty-four questions dealing with student attitudes toward instruction and instructional materials, school building, community support and parental involvement, and general feelings about school, as well as inter-student, teacher-student, and administrator-student relationships.

The students studied urban environmental problems on the average of five hours a week for three months immediately after taking the test.

The experimental group, under the direction of Mr. Bruce Ryan, a certified teacher with three years of experience, proceeded into the planning stages of the urban environmental action program. The experimental class received twenty-four instamatic cameras, two super 8 mm cameras, and sufficient film for each camera. The experimental group was instructed by the teacher to walk through the community taking pictures of what they considered to be environmental problems. After using the discovery

approach, the students categorized their pictures into four major problem areas, which included abandoned cars, abandoned houses, litter and graffiti.

The students discussed, with the residents of Clementine Street and in their classes, the environmental problems which faced the school's surrounding area. They realized full well that the problems were too great for thirty students to solve. They felt, however, that something could be done. The students decided to concentrate their efforts on one city block with the hope of stimulating other groups to begin similar projects in other areas.

In choosing a street for their project, the students felt that it must be close to school and have serious deterioration problems, little or no traffic and a cooperative resident group. These conditions were found on the 2900 block of Clementine Street.

The students met with the residents of Clementine Street individually and in small groups to discuss environmental problems and to plan for solutions. Then they began a more intensive planning procedure. This procedure involved meeting with local businessmen for the purpose of buying materials which they would need for the completion of the project. The students received excellent cooperation from Finnaren and Haley Paint Company, Allegheny West Development Company, and Mr. Charles Turner, a local contractor.

During regular school time, the students reported to

Clementine Street and began the initial clean-up of the whole block. They painted curbs and graffiti-covered walls. Four abandoned, graffiti-covered buildings were the major area of attack. The students painted the four houses from top to bottom. The skills necessary for this job were all new and required careful team work among the students. The skills included constructing a twenty-five foot scaffold, painting, carpentry, soldering, and installing flower boxes.

All of these activities were carefully recorded in student logs. The logs were used for continuous planning sessions and discussion groups with the residents of Clementine Street. The logs were also discussed, during planning sessions, in the classroom.

Since one of their goals was to promote this endeavor in other schools, it was necessary for students to produce 8 mm films and to write scripts that would entice other students to do similar projects.

The control group was under the direction of Mrs. Ellen Lyons, a certified teacher with three years of teaching experience. The control group received traditional classroom instruction, which made use of the latest commercially prepared urban studies materials.

Like the experimental group, the control group also received instruction in urban environmental problems for five hours a week over a three-month period.

The materials used by the control group consisted of:

Challenges in Our Changing Urban Society, Towns and Cities, Urban America: Problems and Promises, Focus on Pollution, Urban Action, a multi-media kit, and The City, a multi-media kit.

Under the direction of Mrs. Lyons, the control group first concentrated on discovering urban environmental problems through the use of films and filmstrips. They proceeded to a discussion of urban environmental problems, with additional group readings and research assignments, to propose solutions for these problems.

The control group students centered their discussions and assignments on housing problems, litter, graffiti, and abandoned cars. The culminating activity was to divide the group into teams, and with the use of the materials from the multi-media kit, The City, each team in the control group constructed a city and defended its city plan to the entire class. Mrs. Lyons' approach was interdisciplinary in nature. She incorporated art, music, and creative writing in her Urban Studies Curriculum.

After a three-month period, the control group and the experimental group were tested with The School Morale Scale.

PRESENTATION AND ANALYSIS OF THE DATA

The major emphasis of this study was to determine if involving students in an urban action project outside of the classroom would have an effect on student attitudes toward school. To measure the effect, the students involved in this study were tested with The School Morale Scale.

The School Morale Scale is an eighty-four item Likert-type scale which measures seven aspects of a student's attitude toward school.

The possible scores on The School Morale Scale are 0 (lowest negative attitude) to 84 (highest positive attitude). To present a clearer picture of the test results, the author statistically distributed the possible test results between 0 (lowest negative attitude) and 1 (highest positive attitude).

Table I presents the pre- and post-means of both the control group and the experimental group. Analysis of covariance was performed on these test results and is presented in columns labeled adjusted mean and F-value. In studying these results, one must take note of the information at the bottom of the table which gives the degrees of freedom, the level of significance, and the required F-value that must be exceeded to determine significance of differences in this study. The .01 level of significance indicates that if the F-value is exceeded, then there is, at best, only one chance in a hundred that the existing differences in scores could be a result of chance variation.

TABLE I

School Morale Scale Results

	Pre-mean	Post-mean	Adjusted Mean	F-value
Total Test				
Experimental	.41	.73	.74	217.206
Control	.39	.47	.47	-------
School Plant				
Experimental	.38	.71	.70	64.8
Control	.33	.41	.42	-------
Student-Teacher Relationship				
Experimental	.34	.68	.69	47.19
Control	.36	.45	.45	-------
General School Morale				
Experimental	.50	.83	.82	50.89
Control	.42	.55	.55	-------
Other Students				
Experimental	.50	.75	.75	50.89
Control	.49	.50	.50	-------
Community				
Experimental	.37	.75	.75	50.07
Control	.35	.48	.48	-------
Administration and Regulations				
Experimental	.49	.74	.75	55.54
Control	.53	.51	.50	-------
Instruction				
Experimental	.38	.73	.74	51.27
Control	.40	.45	.45	-------

1. Degrees of Freedom - 1 and 57
2. Level of Significance - .01
3. The F-value must be 7.31 in determining significance (Roscoe, 1969)

As is evident from the table, the F-value of 7.31, which was required to determine significance, was surpassed in all eight categories of the test. This occurrence statistically expresses that the experimental group performed significantly better than the control group in all attitudinal areas tested.

A number of theoretical assumptions must be met to justify the use of covariance. These assumptions have not necessarily been met in all areas; however, those that have been violated are of a specific nature, in that these violations would only render covariance less able to detect significance. It is obvious that this has caused no problem in this study since all of the F-values have well exceeded the required value.

The primary interest of the testing performed in this study was to measure an attitudinal change in students toward school; nevertheless, an additional, cognitive, teacher-made test was also prepared and presented to both experimental and control groups along with The School Morale Scale.

This cognitive, teacher-made test consisted of sixteen objective questions directly concerned with major urban environmental problems.

Table II presents the pre- and post-means of both the control and experimental groups, as well as the adjusted mean and F-value which was reached by performing an analysis of covariance on these test results.

On Table II, it is also important to take note of the information at the bottom - information which lists the degrees of freedom, the level of significance, and the required F-value that was needed to determine significance in this study.

TABLE II

Cognitive Test Results

	Pre-mean	Post-mean	Adjusted mean	F-value
Experimental Group	9.4	14.07	14.04	6.80
Control Group	9.27	13.13	13.15	-------

1. Degrees of Freedom - 1 and 57
2. Level of Significance - .01
3. The F-value must be 7.31 in determining significance (Roscoe, 1969)

In this table the F-value of 7.31, which was required to determine significance, was not acquired. Hence, there was no significant difference between the experimental and control group scores on the cognitive test. Simply stated, both groups acquired an equal understanding of urban environmental problems.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Two statements can summarize the findings of this study: 1) the test results demonstrated significantly that inner-city students' attitudes toward school improved when they were given an opportunity to participate in urban action projects which dealt with real-life community concerns; 2) the students in both control and experimental groups gained an equivalent degree of factual knowledge in the area of urban environmental problems.

A positive attitude in students toward their school, instruction, teachers, other students, and administrators is a constant goal of all teachers, especially those in the inner-city.

The purpose of this paper was to examine what effective active community service, incorporated in an urban studies program, would have on students' attitudes toward school. As presented in the previous pages, seven different categories of student attitudes were analyzed. The conclusion is that significant gains were demonstrated in all seven areas of student attitudes tested in this study. Using this data, along with personal observations and discussions with student participants, this author feels confident in recommending to other educators the inclusion of similar community work experiences in their urban studies programs.

An important factor in this urban studies program was the

availability of federal money to purchase supplies and materials. The money was helpful, and the author hopes that educators reading this paper will take note in the reference section of Project KARE (Knowledgeable Action to Restore our Environment), a federally financed organization which is presently granting money for similar programs in the five county Philadelphia area. It must be emphasized, however, that a large sum of money is not a prerequisite for developing student community-action groups. Interviewing residents, taking pictures of abandoned cars and sending these pictures with petitions signed by students and local residents to local authorities, painting a graffiti-covered wall, and conducting anti-litter campaigns, which include written statements explaining the project to the local newspapers, are just some of the community projects that can be accomplished with limited funds.

Using the urban environment as a learning resource and initiating student action groups are recommended not only for teenage students in urban studies programs, but also for elementary students as well. Indeed, there exists a myriad of elementary language arts activities that can be taught by directly utilizing the urban environment - an environment which the children will better understand.

The book, Yellow Pages of Learning Resources by Richard Saul Wurman, is recommended as a primer for the interested teacher who would like to involve his class in learning experiences which utilize the urban environment. Wurman's book is, however,

just a starting point. The most important steps are to involve oneself in the local school community, identify the local community concerns and problems, and then gradually involve the class in a discovery, discussion, and contribution process utilizing the urban environment.

This study has demonstrated some new directions for urban studies programs which have a direct, positive effect on the attitude of inner-city students toward their total school endeavor.

REFERENCES

Edison, W. Hunters point redeveloped. (NEA Stock Number: 611-17348) Washington, D.C.: Association for Supervision and Curriculum Development, 1970.

Enquiry work in an urban setting; Information booklet. Schools Council, London, England, 1970.

Henderson, E.L. The world around them: Environmental education in the urban environment. Conservation and Environmental Studies Center for Southern New Jersey, Browns Mills, New Jersey, 1969.

Knowledgeable Action to Restore our Environment (KARE) Colony Office Building, Butler Pike and Route 73, Blue Bell, Pennsylvania.

Nunn, B.B. Boise environmental education project. Boise Elementary School, Portland, Oregon, 1970.

Project Canada west. Canadian urban dynamics: A model for student involvement in the urban setting. Western Curriculum Project on Canada Studies, Edmonton, Alberta, 1971.

Project Canada west. Face of the city: How to look at your urban world. Western Curriculum Project on Canada Studies, Edmonton, Alberta, 1971.

Project Canada west. Inner city project: Student initiated research into problems of the inner city. Western Curriculum Project on Canada Studies, Edmonton, Alberta, 1971.

Wisniewski, R. (Ed.) Teaching about the city. Washington, D.C.: National Council for the Social Studies, 1972.

Wurman, R.S. Yellow pages of learning resources. Massachusetts: MIT Press, 1972.